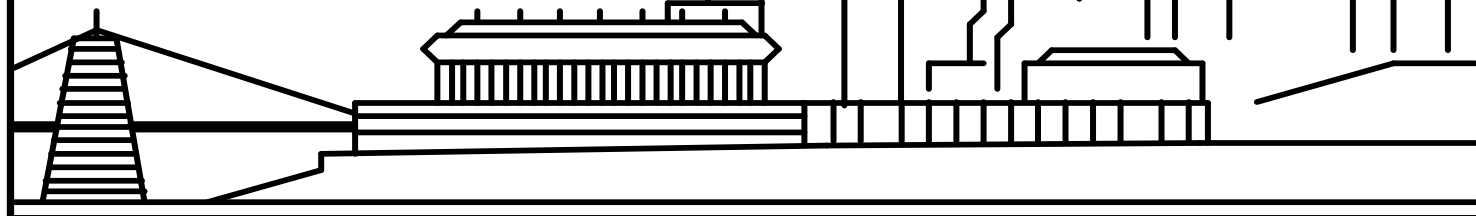




INSTITUTE OF
ELECTRICAL &
ELECTRONICS
ENGINEERS, INC.



FEBRUARY 1999

IEEE CINCINNATI SECTION NEWSLETTER

*As a prelude to a celebration of
ENGINEERS WEEK,*

ENGINEERS AND SCIENTISTS SERVING GREATER CINCINNATI
invites you to attend the
64TH ANNUAL RECOGNITION and AWARDS PROGRAM
to be held on Thursday February 25, 1999 at

**The Syndicate
18 East Fifth Street
Newport, Kentucky
(Downtown Newport - Two blocks east of the County Courthouse)**

Time: 6:00 P.M. - Social Hour (Cash Bar and Vegetable Trays)
7:00 P.M. - Dinner
8:00 P.M. - Presentation of Awards
8:30 P.M. - Speaker (Jim Wuenker, Greater Cincinnati Chamber of Commerce)

Cost: \$30.00

This dinner is a joint meeting with the American Society of Civil Engineers (ASCE), the Ohio Society of Professional Engineers, and the Northern Kentucky Chapter of the Kentucky Society of Professional Engineers (NKSPE). In addition, many other technical and professional societies will be represented by those in attendance. Come and share experiences with other professionals, make new friends, enjoy good food and meet this year's award recipients.

Additional Information:

Meal: The meal features a choice of entree of either prime rib, broiled salmon, or chicken marsala, together with a salad, vegetables, and a dinner beverage. Gratuities are included in the meal price.

Reservations: Reservations may be made by calling Debbie at (513) 287-3909. It is important when making your reservations to indicate your choice of entree. Because we are offering a selection of entree, it will be difficult to accommodate a large number

of walk-ins the night of the dinner. Please cooperate and call in your reservations.

Payment: Checks should be made payable to "ESC". We request that reservations be confirmed by prepayment of dinners before February 18, 1999. Mail your payment to:

ESGC
c/o Bill Schrudde
KZF, Inc.
655 Eden Park Drive
Cincinnati, Ohio 45202

Parking: Valet parking is available and there is also some on-street and commercial lot parking available in the general area.

Speaker: The speaker for the evening will be Mr. Jim Wuenker, Senior Vice President of the Greater Cincinnati Chamber of Commerce. His presentation will include highlights of Regional Development.

Questions: If you have questions or need additional information, feel free to contact Debbie (above) or John Roebel at (513) 287-3640.

CHAIR'S MESSAGE

by Ron Harbaugh, Section Chair

Here it is time for another newsletter. Seems like I just wrote the January message. I look forward to the future, however, I wish it would not rush at me so quickly.

Your Section's Executive Committee met in January. They have lined up some interesting technical meetings for 1999. Please contact me if you have a preferred topic for one of our Section's technical meetings. The fall meetings have not been confirmed yet. We will be able to accommodate your suggestions if there is interest.

Please contact me if you have any comments or suggestions about IEEE in general, or the Section in particular. This is your organization and we, the Exec Committee, are here to serve you. If we don't hear from you, we labor along, business as usual, believing our activity and plans are what the membership desires. Don't hesitate to get involved. My phone numbers are listed elsewhere in this newsletter along with my email address. It is easier and quicker to contact me by email if you can.

A MESSAGE FROM YOUR PACE CHAIRMAN

by Bill Lohner, PACE Chairman

"A Network of Professional Activities for Engineers"

This month I'm taking an article from the IEEE publication, "The Institute" about engineering shortages in our country. The article states that the U.S. government is likely to increase the number of H1-B visas available for the high tech industries. A H1-B visa permits a skilled foreign worker to work in the United States for three years. The visas can be and frequently are, renewed for an additional three years.

The U.S. Congress is expected to approve a proposal to raise the H1-B visa annual cap, which had been 65,000 visas, to 115,000 for 1999 and the year 2000. In 2001 the quota would be reduced to 107,500 visas and back to 65,000 visas in the year 2002.

IEEE-USA has been a vocal critic of the proposed increases, stating that the reported shortages are exaggerated and the U.S. labor pool is deep enough to fill the reported technical worker shortage.

The bill would require employers to pay a \$500 fee for each H1-B visa. The money would be used to train U.S. workers and enforcement of the program's restrictions. Companies with more than 50 employees, of which 15 percent are visa holders, would have to prove they are not using the program to avoid hiring U.S. workers. The companies must pay the visa holders prevailing wages and benefits. The companies do not have to prove this, but only "attest" to this fact. IEEE-USA feels the bill would create lost jobs and lost career opportunities for U.S. technical workers.

A poll conducted by IEEE-USA indicates that 82 percent of those polled opposed this legislation. Eighty six percent of the people were concerned that "U.S. companies should have U.S. workers perform jobs in some technical fields, even if it is faster and less expensive to fill the jobs with foreign professionals."

IEEE-USA has been credited by observers in forcing congress to reconsider this bill, to provide more money to train U.S. workers and shorten the duration of the visas.

This article should call out attention of the need to encourage technical and scientific studies in our schools.

Bill Lohner
PACE Chairman
Cincinnati Section IEEE
(513) 385-7268

NEW MEMBERS

The following individuals are existing IEEE members who have moved into the Cincinnati Section:

STEPHEN J. BALEK	JOHN P. KUTTER	MIKE A. SCHMITT	RICHARD P. WENDT
JOHN M. GABEL	GEORGE M. NIENABER	EDD W. STEPHENS	QIANGHUA XIE
JERRY L. KISNER	FORREST T. REED	CHAD M. VAN FLEET	JANICE S. ZIMMER
		MICHAEL V. VIRDEN	

We wish to extend our welcome to all of our Section's new members!!!

The Shift to Software – Part 1

by Dick Reiman, Historian

The years 1975 to 1981 have a parallel in the gold rush era. Two or three persons, with little capital, had a chance to succeed. The period from 1982 saw the consolidation of the early firms, and new entrants were required to have substantial venture capital. As a result, only a small number became a player in this second phase.

In the first phase beginning in 1975, programs were small since the personal computer of these years had limited memory. The demand was for creative flair and technical knowledge, and the participants were of a bright undergraduate type, with business suits and ties being avoided like the plague. There was a large gap to the existing



4545 CREEK ROAD
CINCINNATI, OHIO 45242-2839

Job Description

Ethicon Endo-Surgery is currently looking to hire a Manufacturing Engineer to help support the Operations group that focuses on the acquisition and integration of acquired companies. This individual will be responsible for assessing electronic products assembly, testing, and documentation along with improving the robustness of the products and processes prior to transfer into Ethicon Endo-Surgery. This position requires the successful candidate's willingness to temporarily be assigned to support an acquisition integration. This individual will be based at the Corporate Headquarters in Cincinnati, Ohio.

The successful candidate will have strong interpersonal and communications skills and must work within a cross-functional team supporting the acquisition integration.

REQUIREMENTS:

The successful candidate at a minimum must have:

- Bachelor of Science in Electrical Engineering
- 3-5 years experience in manufacturing electronic devices
- Experience in electronic assembly
- Experience in an ISO certified environment

NEEDED ATTRIBUTES:

Other strengths needed (not required):

- Experience with FDA/GMP requirements
- Knowledge/Validation of electronic medical devices

Ethicon Endo-Surgery is a division of Johnson & Johnson and offers competitive compensation and benefit plans. If you meet the minimum requirements and want a challenging opportunity please contact Todd J. Kinser at (513) 786-7445 or e-mail tkinser@eesus.jnj.com for more information. You may also send your resume to:

Ethicon Endo-Surgery, Inc.
10123 Alliance Road
Cincinnati, Ohio 45242
Attn: Todd Kinser

Ethicon Endo-Surgery, Inc. is an Equal Opportunity Employer.

The Shift to Software – Part 1 *(Continued from Page 3)*

packaged software industry with their powerful software tools and methods for developing programs.

Beginning in 1981, the market for personal computer software stood at \$140 million, and grew in the following three years to \$1.6 billion, with only a small number of products emerging as the market leaders. Included were VisiCal spreadsheet, WordStar word processor, and the dBase database.

The personal computer marketing was compared to pop music or book publishing, with advertising costs taking 35 cents of every dollar, and was twice the costs of developing the program. The manufacturing costs for duplicating

floppy disks and manuals were the smallest component of the costs. Like pop music, the developer was seeking the elusive "hit" to support their marketing and development costs.

By 1982, the competition had been reduced to fifteen companies for two thirds of the business, and the technical knowledge required had grown with the dramatic increase in performance of the personal computer. The space between the large mainframe software and the competing personal computer was narrowing. As a result, the team to write the software grew from two or three to ten or more people. The original VisiCal spreadsheet had contained 10,000 instructions, while the Lotus 1-2-3 spreadsheet required 400,000 lines of code. Large capital expenditures were required to be a winner among the 35,000 products for a place among the 200 products on a computer store shelf.

Existing firms such as VisiCorp, MicroPro and Ashton Tate became also ran, and four of today's leading companies Microsoft, Novell, Lotus and were growing from minor to major players. VisiCal was wiped out by the arrival of competing Lotus 1-2-3 plus other strategic errors.

Lotus Development Company was formed by a thirty-two year old Mitch Kapor in 1982. He had developed software for VisiCorp in 1979 and had sold his royalty rights to them for \$1.7 million. With this cash, plus other venture capital of \$3 million, he developed Lotus 1-2-3 as a more technically sophisticated software package. The cost of \$1 million to develop, and \$2.5 million to market was rewarded with sales of 850,000 copies at \$495 each, in the first eighteen months. This success was probably the last of a new venture becoming a major one at a stroke.

IEEE NEWS

CONGRESS APPROVES H-1B VISA INCREASE

On October 21, 1998, President Clinton signed into law the American Competitiveness and Workforce Improvement Act (ACWIA). The new law was passed in response to claims from business and educational organizations that the nation faces serious shortages of information technology workers. It makes major changes in laws governing the admission of foreign nationals to work temporarily in the United States on H-1B visas.

The new law provides for a three-year increase in H-1B admissions from 65,000 per year under prior law to 115,000 in FY 1999; 115,000 in FY 2000 and 17,500 in FY 2001. It also establishes a new \$500 per petition filing fee for businesses to fund scholarships in math, engineering and computer science; retraining for displaced workers and pay for improved program administration and enforcement. And it increases monetary penalties on employers of H-1B workers that file fraudulent applications or violate other provisions of the law.

Under pressure from IEEE-USA and other groups, Congress also enacted worker safeguard provisions to ensure that the admission of foreign nationals on H-1B visas does not adversely affect job opportunities and compensation for U.S. workers. Under these provisions, some employers who wish to hire H-1B workers will have to affirm that they have tried to recruit similarly skilled American workers and that they have not displaced American workers before they hire foreign workers. Unfortunately, the recruitment and retention requirements will only apply to a handful of so-called "H-1B dependent" companies.

IEEE-USA and other organizations representing engineers, computer scientists and health care providers opposed enactment of the new law on the grounds that IT worker shortage claims were overstated and because of concerns about the limited applicability of the worker safeguards.

IEEE-USA will support needed reforms in the nation's immigration laws through legislative and regulatory actions designed to safeguard jobs, wages and working conditions for U.S. workers (including citizens, legal

permanent residents and temporary foreign workers) and promote full utilization of the nation's engineering resources during the new Congress.

The IEEE Cincinnati Section Member Names and Phone Numbers

Cincinnati Section Voice Mail (call for meeting reservations)	629-9380
Ron Harbaugh - Chairman	352-6202, Ron.Harbaugh@CinPD.RCC.ORG (E-mail)
Jim Everly - Vice Chairman	556-4241, James.Everly@UC.Edu (E-mail)
Orest Melnyk - Treasurer	397-5419, o.melnyk@ieee.org (E-mail)
Laurie Tappel - Secretary	397-6383, ltappel@cinbell.com (E-mail)
Steve Olenick - Member-At-Large	860-3456, Ext. 138, steveo@nova-eng.com(E-mail)
Mark Strong - Member-At-Large	397-1439, m.strong@ieee.org (E-mail)
Jack Beckmeyer - Arrangements Chairman	248-0901, 248-0226 (Fax), rfschapp@cinti.net (E-mail)
Bill Lohner - PACE Chairman	385-7268
Randy Holt – Membership	572-5710 (Office), holthr@nku.edu (E-mail)
Bob Morrison - Editor	287-3697 (Office), 287-4155 (Fax) j.r.morrison@ieee.org (E-mail)

FEBRUARY 1999

IEEE CINCINNATI SECTION NEWSLETTER



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Electronics Engineers, Inc.
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Cincinnati, Ohio 45253**

DATED MATERIAL

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